

09/485650

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CM1817/JH	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 98/ 12027	International filing date (day/month/year) 10/06/1998	(Earliest) Priority Date (day/month/year) 14/08/1997
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).
2. ☐ Unity of invention is lacking (see Box II).
3. ☒ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 - ☒ filed with the international application.
 - ☐ furnished by the applicant separately from the international application,
 - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
 - ☐ Transcribed by this Authority.
4. With regard to the title, ☒ the text is approved as submitted by the applicant
☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
 - ☒ the text is approved as submitted by the applicant
 - ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:
Figure No. --- ☐ as suggested by the applicant. ☐ None of the figures.
☐ because the applicant failed to suggest a figure.
☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

National Application No

US 98/12027

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 6 C11D3/386 C11D3/37

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 6 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 95 32272 A (THE PROCTER & GAMBLE CO.) 30 November 1995 cited in the application see page 4, line 10 - page 12, line 26 see page 18, line 35 - page 21, line 21 see claims ---	1-11
P, A	WO 97 42288 A (THE PROCTER & GAMBLE CO.) 13 November 1997 cited in the application see page 49, line 1 - page 53, line 2 see claims --- -/--	1-11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
 "&" document member of the same patent family

Date of the actual completion of the international search

20 November 1998

Date of mailing of the international search report

04/12/1998

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 709 452 A (THE PROCTER & GAMBLE CO.) 1 May 1996 see page 4, line 3 - page 5, line 14 see page 9, line 32 - page 11, line 31 see page 11, line 57 - page 14, line 13 see claims 1-8 ---	1,6-11
X	WO 95 09909 A (NOVO NORDISK A/S) 13 April 1995 see page 3, line 19 - page 6, line 12 see page 19, line 10 - page 22, line 37 see claims 1,14-20 ---	1,6,7,9, 11
A	EP 0 755 999 A (THE PROCTER & GAMBLE CO.) 29 January 1997 see page 4, line 45 - page 6, line 21 see page 10, line 39 - line 44 see page 12, line 28 - page 14, line 41 see claims 1-3 ---	1,6-11
A	WO 97 28243 A (NOVO NORDISK A/S) 7 August 1997 see page 3, line 25 - page 4, line 18 see page 19, line 1 - page 23, line 27 see page 31, line 16 - page 45, line 14 see claims 1-15 ---	1,6-11
A	WO 96 16154 A (THE PROCTER & GAMBLE CO.) 30 May 1996 see page 6, line 25 - page 9, line 35 see page 15, line 35 - page 16, line 3 see page 20, line 3 - page 23, line 11 see claims ---	1,6-11
A	WO 95 35362 A (GIST-BROCADES B.V.) 28 December 1995 see page 5, line 9 - page 9, line 6 see page 11, line 3 - line 37 see claims 1-4,7,10,11,13-15,17; example 2 ---	1,6,7,9, 11
A	WO 97 11164 A (GENENCOR INTERNATIONAL) 27 March 1997 cited in the application see claims 1,11,12 ---	1,11
A	WO 97 25417 A (RECOMBINANT BIOCATALYSIS) 17 July 1997 see page 1 - page 5 -----	1,11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 98/12027

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9532272	A	30-11-1995	AU 2387095 A BR 9507691 A CA 2189749 A EP 0760846 A JP 10500717 T US 5565145 A	18-12-1995 23-09-1997 30-11-1995 12-03-1997 20-01-1998 15-10-1996
WO 9742288	A	13-11-1997	AU 2743497 A AU 2813497 A WO 9742287 A	26-11-1997 26-11-1997 13-11-1997
EP 0709452	A	01-05-1996	BR 9509463 A CN 1170429 A JP 10508057 T WO 9613568 A US 5786316 A	14-10-1997 14-01-1998 04-08-1998 09-05-1996 28-07-1998
WO 9509909	A	13-04-1995	AU 7807394 A BR 9407752 A CA 2173214 A CN 1134726 A EP 0722491 A FI 961502 A JP 9503130 T	01-05-1995 04-03-1997 13-04-1995 30-10-1996 24-07-1996 30-05-1996 31-03-1997
EP 0755999	A	29-01-1997	CA 2227616 A CA 2227750 A CA 2227752 A CA 2227782 A CZ 9800196 A EP 0756000 A EP 0756001 A EP 0842254 A WO 9704066 A WO 9704067 A WO 9704053 A WO 9704054 A	06-02-1997 06-02-1997 06-02-1997 06-02-1997 17-06-1998 29-01-1997 29-01-1997 20-05-1998 06-02-1997 06-02-1997 06-02-1997 06-02-1997
WO 9728243	A	07-08-1997	AU 1438497 A	22-08-1997

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/12027

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
W0 9616154 A	30-05-1996	BR 9509729 A CN 1172498 A EP 0791046 A JP 10509203 T US 5707950 A	30-09-1997 04-02-1998 27-08-1997 08-09-1998 13-01-1998
W0 9535362 A	28-12-1995	AU 2886095 A CA 2193117 A EP 0766727 A FI 965042 A NO 965407 A	15-01-1996 28-12-1995 09-04-1997 16-12-1996 24-01-1997
W0 9711164 A	27-03-1997	AU 7361296 A EP 0851914 A NO 981168 A	09-04-1997 08-07-1998 08-05-1998
W0 9725417 A	17-07-1997	AU 2241097 A	01-08-1997